Amendment to the Claims:

This listing of claims will replace all prior versions, and listing of claims in the application.

Listing of Claims

1. (Currently Amended) An integrated ~~Integrated~~ circuit comprising a plurality of modules and a network arranged for transferring messages between said modules wherein a message issued by a first module M comprises first information indicative ~~for~~ of a location of an addressed module S within the network, and second information indicative ~~for~~ of a location within the addressed module S, the integrated circuit comprising

at least one address translation means for receiving said message issued by said first module M comprising said first and second information and arranging the first and the second information as a single address,

wherein said address translation means is adapted to:

determine which module S is being addressed in said received message based on said first information of said single address, and

further determine the selected location of the addressed module S based on said second information of said single address

~~wherein the selected location of the addressed module is determined based on said single address~~.

arranging, at said translation unit, the first and the second information comprising said message as a single address,

determining, at said translation unit, which addressed module S is being addressed in said message issued from said first module M based on said single address, and

further determining, at said translation unit, the selected location of the addressed module S ~~addressed module~~ based on said single address.

2. (Currently Amended) Integrated circuit according to claim 1, further comprising: at least one interface means associated to one of the modules for managing ~~the~~ communication between one of said associated modules ~~module~~ and the network, wherein one of said address translation means is arranged in one of said interface means.

3. (Original) Integrated circuit according to claim 2, wherein said address translation means is arranged in said interface means associated to said first module.

4. (Currently Amended) Integrated circuit according to claim 2, wherein said address translation means comprises an address mapping table configured to store relations between global and local memory mapping.

5. (Original) Integrated circuit according to claim 4, wherein said address mapping table contains fields for every channel of a connection, for network interface ports of a connection, and for local addresses in addressed modules.

6. (Currently Amended) Method for exchanging messages in an integrated circuit comprising a plurality of modules, the messages between the modules being exchanged via a network wherein a message issued by a first module M comprises first information indicative for a location of an addressed module S within the network, and second information indicative for a location within the addressed module S, the method including the steps of:

said first module M issuing a message to an address translation unit,

arranging, at said translation unit, the first and the second information comprising said message as a single address,

determining, at said translation unit, which module S is being addressed in said message issued from said first module M based on said single address, and

further determining, at said translation unit, the selected location of the addressed module S ~~addressed module~~ based on said single address.

7. (New) The method according to claim 6, wherein said interface means is associated with one of said master and addressed modules.

8. (New) The method according to claim 5, wherein communication between said plurality of modules is performed over connections.

9. (New) The method according to claim 8, wherein a connection comprises a set of channels, each channel having a set of connection properties between a first module and at least one second module.

10. (New) The method according to claim 8, wherein connection types comprise: simple connections, multicast connections, narrowcast connections.

11. (New) The method according to claim 9, wherein said connection properties comprise: ordering, flow control, throughput, latency, lossiness, transmission termination, transaction completion, data correctness, priority and data delivery.

12. (New) The method according to claim 10, wherein said simple connection is a connection between a message sending module and a single addressed module.

13. (New) The method according to claim 10, wherein said multicast and narrowcast connections are connections between a message sending module and one or more addressed modules.

14. (New) The method according to claim 1, wherein the addressed module has an address comprised of a global and a local address.

15. (New) The method according to claim 2, wherein said at least one network interface comprises at least two network interface ports to allow a module associated with said at least one network interface to communicate with a router network or at least one other module from among said plurality of modules.

16. (New) Integrated circuit according to claim 2, wherein said at least one network interface is configured to send read and write requests and operations between at least one other network interface over the network.